ELSEVIER

Journal of Electroanalytical Chemistry 441 (1998) 299

JOURNAL OF ELECTROANALYTICAL CHEMISTRY

Author index

Aoki, K. 25, 161

Babaei, A. 197
Baizeng, F. 1
Barnes, C.J. 109
Barrado, E. 227
Baute, N. 237
Belal, F. 39
Bhattacharya, D. 103
Bieniasz, L.K. 271

Cai, X. 167
Calberg, C. 237
Csiszár, M. 287

Da Cunha Belo, M. 5
Dong, S. 95, 153
Duan, S. 65

Fang, B. 65
Fernandes, J.R. 167
Ferreira, M.G.S. 5
Flynn, N.T. 43
Fukume, T. 191

Galvez, J. 259
García-Pastoriza, E. 13
Garnier, F. 83
Garrido, P. 147
Gómez, E. 147
Grant, D.H. 167
Gründler, P. 57
Gu, N. 95, 153

Hamilton, A.D. 33
Huang, J. 51

Iiba, K. 215

Jérôme, R. 237
Jović, V.D. 69
Juodienė, T. 19
Juodkazis, K. 19
Juodkazytė, J. 19

Kaneco, S. 215

Lang, P. 83
Li, J. 161
Li, X.-y. 245
Linton, B. 33
Liu, X. 65
Lou, W. 191
Lukinskas, A. 19
Lund, H. 221

Maksymiuk, K. 205
Martinot, L. 237
McQuillan, A.J. 197
Medina, J. 227
Mekhalif, Z. 83
Mertens, M. 237
Mizuno, T. 215
Montequi, J.I. 227
Morimoto, Y. 77
Morin, M. 173
Mostany, J. 13

Nagy, J.B. 287
Nakayama, M. 191
Novák, M. 287

Ogura, K. 191
Ohta, K. 215
Ozsoz, M. 167

Pardo, R. 227
Pei, J. 245
Peters, D.G. 103
Pickup, P.G. 131
Prieto, F. 227
Pyun, S.-I. 183

Qi, Z. 131

Radi, A. 39
Rat, B. 83
Rondinini, S. 293

Saji, A. 215
Samide, M.J. 103
Scharifker, B.R. 13
Schlettwein, D. 139
Shao, Y. 33
Shuzhen, D. 1
Silva, T.M. 5
Simões, A.M.P. 5
Smyth, M.R. 109
Speiser, B. 271
Szücs, Á. 287

Teragishi, Y. 25
Tölgyesi, M. 287
Tošić, N. 69

Vallés, E. 147

Walczak, M.M. 43
Walls, M. 5
Wang, J. 167
Wang, X. 65
Wang, Y. 51
Weber, S.G. 33
Whelan, C.M. 109
Wojda, A. 205

Xindong, W. 1
Xinyu, L. 1

Yang, D.-F. 173
Yang, T.-H. 183
Yeager, E.B. 77
Yoshida, T. 139

Zerihun, T. 57
Zhang, C. 51
Zhang, W. 51
Zheng, Z.-R. 221
Zhou, H. 95, 153
Zhou, X. 51

ELSEVIER

Journal of Electroanalytical Chemistry 441 (1998) 301–304

JOURNAL OF ELECTROANALYTICAL CHEMISTRY

Subject index

Acid sulphate solution
Determination of Au(III) in the surface layers formed anodically on the gold electrode (Juodkazis et al.) 19
Acrylonitrile grafting
Solvent effect on the electrografting of acrylonitrile on nickel (Mertens et al.) 237
Activation energy
Apparent negative activation energy in electrochemical insulating-to-conducting conversion at polymethylthiophene films (Aoki, Li) 161
Aldehyde cyanohydrins
Electrochemical reduction of *O*-acylated aldehyde cyanohydrins (Zheng, Lund) 221
ALSV technique
Qualitative and quantitative assessment of phases in electrodeposited Ni + Cd alloys by the ALSV technique (Jović, Tošić) 69
Anion-exchanger
Potentiometric studies of bilayers of conducting polymers (Wojda, Maksymiuk) 205
Anode
Surface modification of a MCFC anode by electrodeposition of niobium (Baizeng et al.) 1
Arrhenius plot
Apparent negative activation energy in electrochemical insulating-to-conducting conversion at polymethylthiophene films (Aoki, Li) 161
Au electrode
Electrochemical reduction of CO_2 on Au in KOH + methanol at low temperature (Kaneco et al.) 215
Au(III) determination
Determination of Au(III) in the surface layers formed anodically on the gold electrode (Juodkazis et al.) 19

Bilayers
Potentiometric studies of bilayers of conducting polymers (Wojda, Maksymiuk) 205

C_{70}
Electrochemistry of C_{70} fullerene films in aqueous solutions (Csiszár et al.) 287
Carbon dioxide
Electrochemical reduction of CO_2 on Au in KOH + methanol at low temperature (Kaneco et al.) 215
Carbon fiber electrode
Carbon fiber microelectrodes for adsorptive stripping analysis of trace nucleic acids (Wang et al.) 167
Carbon paste electrode
Electrochemical study of iron ferrite sludge obtained under the conditions proposed for the purification of waste water at a carbon paste electrode (Barrado et al.) 227
Catalytic activity
CO oxidation on smooth and high area Pt, Pt–Ru and Pt–Sn electrodes (Morimoto, Yeager) 77
Catalytic reduction
Catalytic reduction of cyclohexanecarbonyl chloride with electrogenerated nickel(I) salen in acetonitrile (Bhattacharya et al.) 103
Cation-exchanging matrix
Potentiometric studies of bilayers of conducting polymers (Wojda, Maksymiuk) 205
Cationic conducting polymers
Restructuring of cationic conducting polymers by $Fe(CN)_6^{4-}$ (Qi, Pickup) 131
CE mechanism
Zeroth-order solution and higher-order corrections for the CE mechanism in double potential step techniques (Galvez) 259
Chronoamperometry
Restructuring of cationic conducting polymers by $Fe(CN)_6^{4-}$ (Qi, Pickup) 131
Chronoamperometric study of the reductive desorption of alkanethiol self-assembled monolayers (Yang, Morin) 173
Chronopotentiometry
Carbon fiber microelectrodes for adsorptive stripping analysis of trace nucleic acids (Wang et al.) 167
CME
Preparation, characterization and application of an electrode modified with electropolymerized $CuPtCl_6$ (Pei, Li) 245
Cobalt phthalocyanines
Electrochemical reduction of substituted cobalt phthalocyanines adsorbed on graphite (Schlettwein, Yoshida) 139
Conducting zone propagation
A fractal feature of the conducting zone by conversion rates from any redox state into the fully conducting state of polyaniline films (Aoki, Teragishi) 25
Conductivity
Apparent negative activation energy in electrochemical insulating-to-conducting conversion at polymethylthiophene films (Aoki, Li) 161
CO oxidation
CO oxidation on smooth and high area Pt, Pt–Ru and Pt–Sn electrodes (Morimoto, Yeager) 77
$CuPtCl_6$
Preparation, characterization and application of an electrode modified with electropolymerized $CuPtCl_6$ (Pei, Li) 245
Current decay transient
Theoretical analysis of hydrogen transport through an electrode at the coexistence of two hydrogen-poor and -rich phases based upon the concept of hydrogen trapping (Pyun, Yang) 183
Cu underpotential
The influence of heterocyclic thiols on the electrodeposition of Cu on Au(111) (Whelan et al.) 109
Cyclic voltammetry
Reaction of electrogenerated oxamniquine radical anion with glutathione (Radi, Belal) 39
Oxidation of formaldehyde, methanol, formic acid and glucose at ac heated cylindrical Pt microelectrodes (Zerihun, Gründler) 57
Simultaneous electrodeposition and detection of platinum on silicon surfaces (Garrido et al.) 147
Studies of ferrocene derivative diffusion and heterogeneous kinetics in polymer electrolyte by using microelectrode voltammetry (Zhou et al.) 153

An in situ UV–vis and IR spectroelectrochemical study of the disposition of a hydroquinone anion salt on platinum electrodes from dichloromethane solutions (Babaei, McQuillan) 197
Electrochemical study of iron ferrite sludge obtained under the conditions proposed for the purification of waste water at a carbon paste electrode (Barrado et al.) 227
Cyclohexanecarbonyl chloride
Catalytic reduction of cyclohexanecarbonyl chloride with electrogenerated nickel(I) salen in acetonitrile (Bhattacharya et al.) 103

Dc polarization
Oxidation of formaldehyde, methanol, formic acid and glucose at ac heated cylindrical Pt microelectrodes (Zerihun, Gründler) 57
Dicarboxylate
Electrochemical studies on molecular recognition of anions: complex formation between xylylenyl bis-iminoimidazolinium and dicarboxylates in nitrobenzene and water (Shao et al.) 33
Dichloromethane
An in situ UV–vis and IR spectroelectrochemical study of the disposition of a hydroquinone anion salt on platinum electrodes from dichloromethane solutions (Babaei, McQuillan) 197
1,2-Dicyclohexylethene-1,2-diol dicyclohexanoate
Catalytic reduction of cyclohexanecarbonyl chloride with electrogenerated nickel(I) salen in acetonitrile (Bhattacharya et al.) 103
Diffusion coefficient
A study on the diffusion of quinhydrone in polymer electrolyte (Dong et al.) 95
Diffusion coefficients
Studies of ferrocene derivative diffusion and heterogeneous kinetics in polymer electrolyte by using microelectrode voltammetry (Zhou et al.) 153
Digital simulation
Use of sensitivity analysis methods in the modelling of electrochemical transients. Part 1. Gaining more insight into the behaviour of kinetic models (Bieniasz, Speiser) 271
Diketone
Electrochemical reduction of *O*-acylated aldehyde cyanohydrins (Zheng, Lund) 221
DNA
Carbon fiber microelectrodes for adsorptive stripping analysis of trace nucleic acids (Wang et al.) 167
Double-pulse techniques
Zeroth-order solution and higher-order corrections for the CE mechanism in double potential step techniques (Galvez) 259
DSC
Electrochemical study of iron ferrite sludge obtained under the conditions proposed for the purification of waste water at a carbon paste electrode (Barrado et al.) 227

Effect of temperature
Electrochemical reduction of CO_2 on Au in KOH + methanol at low temperature (Kaneco et al.) 215
Electric percolation threshold
A fractal feature of the conducting zone by conversion rates from any redox state into the fully conducting state of polyaniline films (Aoki, Teragishi) 25
Electrocatalysis
Preparation, characterization and application of an electrode modified with electropolymerized $CuPtCl_6$ (Pei, Li) 245
Electrochemical kinetics
Use of sensitivity analysis methods in the modelling of electrochemical transients. Part 1. Gaining more insight into the behaviour of kinetic models (Bieniasz, Speiser) 271
Electrochemically synthesized polyaniline films
A fractal feature of the conducting zone by conversion rates from any redox state into the fully conducting state of polyaniline films (Aoki, Teragishi) 25
Electrochemical reduction
Electrochemical reduction of substituted cobalt phthalocyanines adsorbed on graphite (Schlettwein, Yoshida) 139
Electrochemical reduction of CO_2 on Au in KOH + methanol at low temperature (Kaneco et al.) 215
Electrochemical reduction of *O*-acylated aldehyde cyanohydrins (Zheng, Lund) 221
Electrochemical switching
Apparent negative activation energy in electrochemical insulating-to-conducting conversion at polymethylthiophene films (Aoki, Li) 161
Electrochemistry
Electrochemistry of C_{70} fullerene films in aqueous solutions (Csiszár et al.) 287
Electrocrystallization
Spatial distribution of nuclei. Inhibition of local nucleation rates by the most influential neighbours (García-Pastoriza et al.) 13
Electrode
The mechanism of surface modification of a MCFC anode (Fang et al.) 65
Electrodeposition
Surface modification of a MCFC anode by electrodeposition of niobium (Baizeng et al.) 1
The mechanism of surface modification of a MCFC anode (Fang et al.) 65
Qualitative and quantitative assessment of phases in electrodeposited Ni + Cd alloys by the ALSV technique (Jović, Tošić) 69
The influence of heterocyclic thiols on the electrodeposition of Cu on Au(111) (Whelan et al.) 109
An in situ UV–vis and IR spectroelectrochemical study of the disposition of a hydroquinone anion salt on platinum electrodes from dichloromethane solutions (Babaei, McQuillan) 197
Electropolymerization
Solvent effect on the electrografting of acrylonitrile on nickel (Mertens et al.) 237
Preparation, characterization and application of an electrode modified with electropolymerized $CuPtCl_6$ (Pei, Li) 245
Exclusion zone
Spatial distribution of nuclei. Inhibition of local nucleation rates by the most influential neighbours (García-Pastoriza et al.) 13

Ferrite sludge
Electrochemical study of iron ferrite sludge obtained under the conditions proposed for the purification of waste water at a carbon paste electrode (Barrado et al.) 227
Ferrocene derivatives
Studies of ferrocene derivative diffusion and heterogeneous kinetics in polymer electrolyte by using microelectrode voltammetry (Zhou et al.) 153
Film
Electrochemistry of C_{70} fullerene films in aqueous solutions (Csiszár et al.) 287
Film|electrolyte
Electronic structure of iridium oxide films formed in neutral phosphate buffer solution (Silva et al.) 5
Film growth
Simultaneous electrodeposition and detection of platinum on silicon surfaces (Garrido et al.) 147
Fullerene
Electrochemistry of C_{70} fullerene films in aqueous solutions (Csiszár et al.) 287

Glutarate
Electrochemical studies on molecular recognition of anions: complex formation between xylylenyl bis-iminoimidazolinium and dicarboxylates in nitrobenzene and water (Shao et al.) 33

Gold anodic oxidation
Determination of Au(III) in the surface layers formed anodically on the gold electrode (Juodkazis et al.) 19
Gold single crystal
Chronoamperometric study of the reductive desorption of alkanethiol self-assembled monolayers (Yang, Morin) 173
Graphite
Electrochemical reduction of substituted cobalt phthalocyanines adsorbed on graphite (Schlettwein, Yoshida) 139

Heterocyclic thiols
The influence of heterocyclic thiols on the electrodeposition of Cu on Au(111) (Whelan et al.) 109
Heterogeneous electron transfer rate constants
Studies of ferrocene derivative diffusion and heterogeneous kinetics in polymer electrolyte by using microelectrode voltammetry (Zhou et al.) 153
Higher-order corrections
Zeroth-order solution and higher-order corrections for the CE mechanism in double potential step techniques (Galvez) 259
$[(H_2O)(phen)_2FeOFe(phen)_2(H_2O)]^{4+}$
Spectroelectrochemical study of the generation of *tris*-(1,10-phenanthroline)iron(II/III) from μ-oxo-bis[aquabis(1,10-phenanthroline)iron(III)] (Walczak, Flynn) 43
Hydrogen transport
Theoretical analysis of hydrogen transport through an electrode at the coexistence of two hydrogen-poor and -rich phases based upon the concept of hydrogen trapping (Pyun, Yang) 183
Hydrogen trapping
Theoretical analysis of hydrogen transport through an electrode at the coexistence of two hydrogen-poor and -rich phases based upon the concept of hydrogen trapping (Pyun, Yang) 183
Hydroquinone
An in situ UV–vis and IR spectroelectrochemical study of the disposition of a hydroquinone anion salt on platinum electrodes from dichloromethane solutions (Babaei, McQuillan) 197

In situ electrochemical chronoabsorptometry
A fractal feature of the conducting zone by conversion rates from any redox state into the fully conducting state of polyaniline films (Aoki, Teragishi) 25
Ion-pairing
Restructuring of cationic conducting polymers by $Fe(CN)_6^{4-}$ (Qi, Pickup) 131
Iridium oxide
Electronic structure of iridium oxide films formed in neutral phosphate buffer solution (Silva et al.) 5
Irreversible trap
Theoretical analysis of hydrogen transport through an electrode at the coexistence of two hydrogen-poor and -rich phases based upon the concept of hydrogen trapping (Pyun, Yang) 183

Marcus theory
Use of sensitivity analysis methods in the modelling of electrochemical transients. Part 1. Gaining more insight into the behaviour of kinetic models (Bieniasz, Speiser) 271
MCFC
Surface modification of a MCFC anode by electrodeposition of niobium (Baizeng et al.) 1
The mechanism of surface modification of a MCFC anode (Fang et al.) 65
2-mercaptobenzimidazole
The influence of heterocyclic thiols on the electrodeposition of Cu on Au(111) (Whelan et al.) 109
2-mercaptobenzothiazole
The influence of heterocyclic thiols on the electrodeposition of Cu on Au(111) (Whelan et al.) 109

Methanol electrolyte
Electrochemical reduction of CO_2 on Au in KOH + methanol at low temperature (Kaneco et al.) 215
Microelectrode
A study on the diffusion of quinhydrone in polymer electrolyte (Dong et al.) 95
Carbon fiber microelectrodes for adsorptive stripping analysis of trace nucleic acids (Wang et al.) 167
Monte Carlo simulation
A fractal feature of the conducting zone by conversion rates from any redox state into the fully conducting state of polyaniline films (Aoki, Teragishi) 25
Mott-Schottky
Electronic structure of iridium oxide films formed in neutral phosphate buffer solution (Silva et al.) 5

Ni + Cd alloys
Qualitative and quantitative assessment of phases in electrodeposited Ni + Cd alloys by the ALSV technique (Jović, Tošić) 69
Nickel(I) salen
Catalytic reduction of cyclohexanecarbonyl chloride with electrogenerated nickel(I) salen in acetonitrile (Bhattacharya et al.) 103
Non-steady-state chronoamperometry
A study on the diffusion of quinhydrone in polymer electrolyte (Dong et al.) 95
Nucleation
Spatial distribution of nuclei. Inhibition of local nucleation rates by the most influential neighbours (García-Pastoriza et al.) 13
Nucleic acids
Carbon fiber microelectrodes for adsorptive stripping analysis of trace nucleic acids (Wang et al.) 167

Ohmic drop
Apparent negative activation energy in electrochemical insulating-to-conducting conversion at polymethylthiophene films (Aoki, Li) 161
Oxamniquine
Reaction of electrogenerated oxamniquine radical anion with glutathione (Radi, Belal) 39
Oxidation
In situ study of the resistance of the electropolymerized polypyrrole film using platinum dual-disk microelectrodes (Wang et al.) 51

Phase distribution
Qualitative and quantitative assessment of phases in electrodeposited Ni + Cd alloys by the ALSV technique (Jović, Tošić) 69
Photometry
Determination of Au(III) in the surface layers formed anodically on the gold electrode (Juodkazis et al.) 19
Platinum dual-disk microelectrode
In situ study of the resistance of the electropolymerized polypyrrole film using platinum dual-disk microelectrodes (Wang et al.) 51
Platinum electrodeposition
Simultaneous electrodeposition and detection of platinum on silicon surfaces (Garrido et al.) 147
Platinum–ruthenium
CO oxidation on smooth and high area Pt, Pt–Ru and Pt–Sn electrodes (Morimoto, Yeager) 77
Platinum–tin
CO oxidation on smooth and high area Pt, Pt–Ru and Pt–Sn electrodes (Morimoto, Yeager) 77
Polarization
Potential oscillations of a stainless steel electrode during galvanostatic polarization in a mixed solution of sulfuric and chromic acids (Ogura et al.) 191
Polymer electrolyte
A study on the diffusion of quinhydrone in polymer electrolyte (Dong et al.) 95

Studies of ferrocene derivative diffusion and heterogeneous kinetics in polymer electrolyte by using microelectrode voltammetry (Zhou et al.) 153
Polypyrrole
Potentiometric studies of bilayers of conducting polymers (Wojda, Maksymiuk) 205
Polypyrrole film (PPy)
In situ study of the resistance of the electropolymerized polypyrrole film using platinum dual-disk microelectrodes (Wang et al.) 51
Polythiophene films
Apparent negative activation energy in electrochemical insulating-to-conducting conversion at polymethylthiophene films (Aoki, Li) 161
Potential frequency
Potential oscillations of a stainless steel electrode during galvanostatic polarization in a mixed solution of sulfuric and chromic acids (Ogura et al.) 191
Potential oscillations
Potential oscillations of a stainless steel electrode during galvanostatic polarization in a mixed solution of sulfuric and chromic acids (Ogura et al.) 191
Potentiometric stripping analysis
Carbon fiber microelectrodes for adsorptive stripping analysis of trace nucleic acids (Wang et al.) 167
Pt electrode
An in situ UV–vis and IR spectroelectrochemical study of the disposition of a hydroquinone anion salt on platinum electrodes from dichloromethane solutions (Babaei, McQuillan) 197
Pt microelectrodes
Oxidation of formaldehyde, methanol, formic acid and glucose at ac heated cylindrical Pt microelectrodes (Zerihun, Gründler) 57

Quinhydrone
A study on the diffusion of quinhydrone in polymer electrolyte (Dong et al.) 95

Radical anion
Reaction of electrogenerated oxamniquine radical anion with glutathione (Radi, Belal) 39
Reversible trap
Theoretical analysis of hydrogen transport through an electrode at the coexistence of two hydrogen-poor and -rich phases based upon the concept of hydrogen trapping (Pyun, Yang) 183
RNA
Carbon fiber microelectrodes for adsorptive stripping analysis of trace nucleic acids (Wang et al.) 167

Sensitivity analysis
Use of sensitivity analysis methods in the modelling of electrochemical transients. Part 1. Gaining more insight into the behaviour of kinetic models (Bieniasz, Speiser) 271
Silicon
Simultaneous electrodeposition and detection of platinum on silicon surfaces (Garrido et al.) 147
Solvent effect
Solvent effect on the electrografting of acrylonitrile on nickel (Mertens et al.) 237
Spatial distribution
Spatial distribution of nuclei. Inhibition of local nucleation rates by the most influential neighbours (García-Pastoriza et al.) 13
Spectroelectrochemical study
Spectroelectrochemical study of the generation of *tris*-(1,10-phenanthroline)iron(II/III) from μ-oxo-bis[aquabis(1,10-phenanthroline)iron(III)] (Walczak, Flynn) 43
Spectroelectrochemistry
An in situ UV–vis and IR spectroelectrochemical study of the disposition of a hydroquinone anion salt on platinum electrodes from dichloromethane solutions (Babaei, McQuillan) 197
Standard chemical potential of phases
Qualitative and quantitative assessment of phases in electrodeposited Ni + Cd alloys by the ALSV technique (Jović, Tošić) 69
Surface layers
Determination of Au(III) in the surface layers formed anodically on the gold electrode (Juodkazis et al.) 19
Surface modification
Surface modification of a MCFC anode by electrodeposition of niobium (Baizeng et al.) 1
The mechanism of surface modification of a MCFC anode (Fang et al.) 65

Temperature dependence
Apparent negative activation energy in electrochemical insulating-to-conducting conversion at polymethylthiophene films (Aoki, Li) 161
Tessellation
Spatial distribution of nuclei. Inhibition of local nucleation rates by the most influential neighbours (García-Pastoriza et al.) 13
Thiol self-assembled monolayer
Chronoamperometric study of the reductive desorption of alkanethiol self-assembled monolayers (Yang, Morin) 173
Transient methods
Use of sensitivity analysis methods in the modelling of electrochemical transients. Part 1. Gaining more insight into the behaviour of kinetic models (Bieniasz, Speiser) 271
Tris-(1,10-phenanthroline)iron(II/III)
Spectroelectrochemical study of the generation of *tris*-(1,10-phenanthroline)iron(II/III) from μ-oxo-bis[aquabis(1,10-phenanthroline)iron(III)] (Walczak, Flynn) 43
Two-phase coexistence
Theoretical analysis of hydrogen transport through an electrode at the coexistence of two hydrogen-poor and -rich phases based upon the concept of hydrogen trapping (Pyun, Yang) 183

Water/nitrobenzene interface
Electrochemical studies on molecular recognition of anions: complex formation between xylylenyl bis-iminoimidazolinium and dicarboxylates in nitrobenzene and water (Shao et al.) 33

XRD
Electrochemical study of iron ferrite sludge obtained under the conditions proposed for the purification of waste water at a carbon paste electrode (Barrado et al.) 227

Zeroth-order solution
Zeroth-order solution and higher-order corrections for the CE mechanism in double potential step techniques (Galvez) 259